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DEPARTMENT OF WATER AND POWER

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July 22, 1983

Mr. James H. Anthony
Project Director
Intermountain Power Project
931 General Office Building

Intermountain Power Project (IPP)
Permit Modification Meeting Between
the Utah Department of Health (DOH)
and the IPP

Transmitted herewith for your files is an attendance sheet (Attachment 1) and a record of meeting between DOH and IPP personnel (Attachment 2) that was held on July 6, 1983 in Salt Lake City, Utah. The major subjects of the meeting were more stringent air quality permit emission limits for SO_2 and NOx than specified in the 1980 permits and the legality of current construction.

If you have any questions of comments, please contact Mr. Timothy L. Conkin on extension 5794.

Luis E. Escalante

LUIS E. ESCALANTE
Manager
Civil, Structural Engineering
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TLC:gp

Attachments

cc: w/Attachments
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Attachment 1

Attendance - July 6, 1983

IPP Representatives

James H. Anthony	IPP Project Office, DWP
Ronald L. Nelson	IPP Project Office, DWP
Roger T. Pelote	APERA, DWP
James J. Carnevale	MES, DWP
Timothy L. Conkin	MES, DWP
Henry V. Nickel	IPP Legal Counsel, Hunton & Williams, Washington, D.C.
James A. Holtkamp	IPP Legal Counsel, Van Cott, Bagley, Cornwall & McCarthy, Salt Lake City, Utah
Ronald L. Rencher	Acting General Manager, Intermountain Power Agency
Lowell L. Smith	KVB, Western Engineering Division

DOH Representatives

Brent C. Bradford	Director, Bureau of Air Quality, DOH
Fred Nelson	Utah Legal Counsel, Utah State Attorney General's Office
David A. Kopta	Public Health Engineer, DOH
John Walton	Public Health Engineer, DOH

Attachment 2

Meeting with the Utah Department of Health (DOH)
July 6, 1983

A meeting was held on July 6, 1983 in Salt Lake City, Utah between representatives of the Utah DOH and the IPP. The DOH presented a preliminary Best Available Control Technology (BACT) determination to IPP based on technical reports submitted by IPP and other technical reports.

The DOH made it clear that expedient public notification of the BACT determination will help prevent environmental groups from forcing the DOH to issue a "Cease and Desist Construction Order" to IPP for constructing the generating station without proper approval of the design changes made since the 1980 air quality permits were granted. However, the DOH agreed to withhold public notification until after IPP has submitted additional technical reports by July 18, 1983.

The following summarizes the technical issues:

BACT Determination:

The DOH stated that the current design of emission control equipment is acceptable, the particulate matter (PM) emission limit specified in the 1980 air quality permit is acceptable, but more stringent emission limits for SO_2 and NOx may be required. The following is the July 6, 1983 DOH preliminary BACT determination:

PM:	0.020 lb/MM Btu	(same as the 1980 permit limit)
SO_2:	0.14 lb/MM Btu 90% Removal	(compared to 1980 permit limit of 0.150 lb/MM Btu and 90% removal)
NOx:	0.50 lb/MM Btu	(compared to 1980 permit limit of 0.550 lb/MM Btu)

The DOH stated that the methods used to meet the more stringent SO_2 and NOx emission limits are entirely the decison of IPP.

The following is the DOH reasoning for the BACT determination:

1. A determination is justified because IPP re-opened the BACT review when design changes were made since the 1980 air quality permit was issued.

2. "Tweaking" the boiler control knobs to achieve the lower NOx emissions and procurement of low-sulfur coal and blending high sulfur with low-sulfur coal (DOH feels coal blending is not a great problem) to achieve lower SO_2 emissions is feasible and reasonable based on other existing source emissions and operating procedures. Specific existing sources mentioned as supporting a lower SO_2 emission limit were a Kennecott Company plant in Utah, a coal-fired power

plant at Brigham Young University, Utah Power and Light's Hunter No. 3, Louisville Gas and Electric Mill Creek Unit 3, and Southern Indiana A.B. Brown Unit 1 were mentioned as supporting a lower NOx emission limit.

3. The DOH will not consider, in the BACT determination, the cost to IPP to renegotiate emission limit contractural guarantees with the equipment vendors.

4. The DOH will not consider, in the BACT determination, the cost to IPP if the more stringent emission limits are exceeded but the contractural guarantees are not, i.e., the DOH has no sympathy for IPP if emission limit exceedances between 0.14-0.150 lb/MM Btu for SO_2 and 0.50-0.550 lb/MM Btu for NOx are not guaranteed to be corrected by the equipment vendors.

5. The DOH will not consider, in the BACT determination, increased bond sales risk or reduced Project viability to Southern California Intermountain Power Agency participants.

6. Emission control technology has improved since the 1980 air quality permits were granted.

7. IPP would be required to closely examine Selective Catalytic Reduction (SCR) for control of NOx emissions if it were submitting a new air quality permit application, i.e., a more stringent emission limit of 0.50 lb/MM Btu is not too compromising in comparison to a limit based on SCR technology.

8. The clean air in Utah is not the sole possession of IPP and the DOH is required by law to allocate consumption of clean air on a first-come, first-serve, as-needed basis. Therefore, IPP is required to impact the air as little as practicable to allow for expansion by other industry or use by citizens (computer modeling will be redone to revise the predicted air quality impacts of IPP once more stringent emission limits are agreed upon).

9. The DOH is looking for a "cheap way to crack down on emission limits to satisfy the environmentalists".

<u>The following is IPP's response to the DOH BACT determination:</u>

1. IPP gave up any cushion between predicted emissions and emission limits during the 1980 negotiations with the DOH and Environmental Protection Agency. The SO_2 emission control equipment and boiler have been designed strictly to meet the very stringent 1980 air quality permit emission limits.

2. NOx emissions cannot be predicted with any accuracy. Babcock & Wilcox (B&W) has stated that NOx emissions could be very close to 0.550 lb/MM Btu (1980 permit emission limit).

3. The B&W boiler design is the most advanced for control of NOx emissions in the country.

4. The IPP Generating station will be a base-loaded plant and not a cycling plant as are the Louisville Gas and Electric Mill Creek Unit 3 and Southern Indiana A.B. Brown Unit 1 plants. A NOx BACT determination for IPP cannot be based on studies conducted at these two cycling plants due to the disparity in loading.

   Utah Power and Light's Hunter No. 3 is a mine-mouth operation unlike IPP which will obtain coal from four to six sources. An SO_2 BACT determination for IPP cannot be based on this plant due to the disparity in the number of coal sources.

   The Kennecott Company does not use SO_2 control equipment at its Utah plant. Kennecott's uncontrolled SO_2 emission limit is large in comparison to the stringent 1980 permit limit for IPP. Therefore, Kennecott cannot be used as an exemplary example of a plant meeting an emission limit through good coal handling procedures.

5. IPP probably has the lowest cumulative emission limits for PM, SO_2 and NOx in the country.

6. There will be times when IPP cannot control coal blending to dampen out high-sulfur coal quality excursions resulting from the delivery of nonconforming coal. Delivery of low-sulfur coal cannot be guaranteed. Once high-sulfur coal is delivered, the coal cannot be returned and will be burned. During these periods a more stringent SO_2 emission limit of 0.14 lb/MM Btu based on 90% removal will be exceeded.

7. The availability and reliability of the generating station will be jeopardized due to more stringent emission limits.

8. A more stringent emission limit for SO_2 and NOx will create a window of vulnerability to IPP because emission excursions between the new limits and the 1980 limits are not guaranteed to be corrected by the equipment vendors. These excursions could result in great expense to IPP.

9. More stringent emission limits will severely jeopardize successful IPP bond sales. The possibility of poor bond sales could result in IPP ceasing to be an economically viable project to the Southern California Intermountain Power Agency participants. Poor Project viability will cause these participants to pull out of the Agency, the collapse of the Project, and the bankruptcy of the Utah participants.